



## Telephone Line Analyzer Detector

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### Features

- Digital Demodulation to confirm that the telephone line is not passing audio (demodulation code is upgrade able for new phone systems, expected to cover 80% of world's PBX/ACD phone systems)
- Frequency Domain Reflectometer (FDR) similar to TDR to check for taps on the line
- NLJD Line Trace Probe for verifying electronic taps and tracing wires to locate electronics
- Audio Oscilloscope with active input (20Hz to 20KHz)
- High Gain Audio Amplifier (20Hz to 20KHz)
- Digital Multimeter tests voltage, current, resistance & capacitance
- Bias Generator  $\pm 80$  VDC, direct digital control to use with Audio Amplifier, NLJD, and FDR.
- Automatic Internal Pair Switching automatically performs tests on all pair combinations
- RF Broadband Detector tests lines for RF up to 8GHz
- Multi-Test Database System performs multiple tests at once on all pair combinations, storing data in a database for comparison against other lines and historical comparison



## Technical Specifications

### *Control System*

Primary Computer: 32bit RISC processor, 520MHz  
Internal Memory: 64MB SDRAM (OS), 64MB Flash

### *Digital I/O*

Network: 10/100 Ethernet Controller  
USB: USB Host (B type) for connection to PC; USB Device (A type)

### *Analog I/O*

Headphone Output: 3.5mm Stereo connector  
Microphone Input: 3.5mm Mono input

### *User Interface*

Hard Keys: 12 Soft Menu Keys, 5 Button Quadrant Navigation  
Encoder: High-Resolution Optical Encoder  
Test Inputs: Dual MOD8: Supports 2, 4, 6, & 8 wire Modular Phone Jacks

### *RF System*

Spectrum Analyzer: Dual Conversion, Super-Heterodyne Receiver 10-85mhz  
Broadband Detector: RF SMB Input: 100 kHz to 8GHz

### *Digital Multimeter*

Range: Quick Response Auto-Ranging, 500msec Sample Rate  
AC/DC Volts: 0 to 400VDC, 0 to 250VAC

### *Bias Generator*

Optically Isolated, Dir: High voltage DAC

### *Audio*

Optically Isolated: Wideband Audio path optically isolates user from connection  
Bandwidth: 10MHz at nominal gain of 40dB

### *Power System*

AC Input: 100-240V, 50-60Hz  
Removable Battery: Rechargeable Lithium ion, 4-6 hours of run time

### *Mechanical*

Dimensions: 24.1cm x 30.5cm x 5.0cm  
Weight with Battery: 2.7 kg

## Software

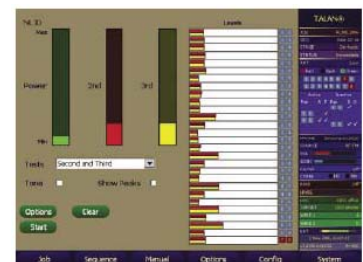
### *Digital PBX Demodulation*

Includes Digital Decoding capabilities for approx 80% of all digital phone systems. Upgradeable downloads



### *NLJD Line Trace Capability*

NLJD Line Tracer Probe not only traces lines, it also detects any electronic devices on the line-tape



### *Frequency Domain Reflectometer*

Similar to traditional TDR, however, no blind spots and more consistent resolution





If you would like further Information about ELAMAN,  
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